

## Bi-Weekly IOOS® Z-GRAM – 7 September, 2012

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The Z-Gram is an informal way of keeping you up-to-date on US IOOS® activities. Please advise of additional addressees, or if you are receiving and no longer want to receive. If you think others could benefit from the Z-Gram please pass it on. To see previous Z-Grams go the IOOS website and view under [program updates](#).

### IOOS® - A Partnership Supporting Lives and Livelihoods

#### Governance and Management Subsystem:

- **SUCCESSFUL Advisory Committee Meeting:** On Aug. 29–30, the newly established U.S. IOOS Federal Advisory Committee met for the first time. Dr. Sullivan kicked off the meeting by swearing in the new members, and provided them with a charge from NOAA as the Lead Federal Agency for US IOOS. The IOOC Co-Chairs and IOOC Senior Agency Leadership spoke about the importance and challenges of implementing IOOS, and engaged in substantive discussion with the Committee. Rick Spinrad, Oregon State University, is the Chair and Tom Gulbransen, Battelle Memorial Institute, was elected as the Vice Chair. The Chair, the DFO (Zdenka) and the Committee members all agreed the meeting was a great success and all left energized and ready to work! The Committee expects their next meeting to be in the Denver area in January 2013. All presentations and relevant post-meeting materials will be posted shortly on the IOOS website at: [http://www.ioos.gov/about/governance/ioos\\_advisory\\_committee.html](http://www.ioos.gov/about/governance/ioos_advisory_committee.html).
- **Blue Marvel – Ocean Mysteries:** In a collaboration of the US National Science Foundation and the Group on Earth Observations, the NSF-funded Ocean Research Collaboration Network is proud to announce the first webinar in the series “Blue Marvel – Ocean Mysteries.” The series will look at the ocean and its impact on us - from life in the ocean to human life on Earth. Whether it is food, disease, climate change or recreation, oceans affect us directly or indirectly. But we know little about the oceans. There are parts of the oceans that are more mysterious than the surface of the moon. The series will look at the mysteries and impacts of the ocean - the Blue Marvel - and how research and a broad spectrum of scientists, from engineers to chemists, microbiologists to archaeologists play a role in finding the answers. The first of these web-based seminars, “Oceans, Climate and Human Health: the cholera paradigm” will be presented by **Dr. Rita Colwell** on Tuesday the **16th of October** at 10AM EDT/14:00 UTC. **For more information and access to the webinar, go to [www.oceanmysteries.net](http://www.oceanmysteries.net) after September 18.** Dr. Colwell was the 11th director of the United States’ National

Science Foundation from 1998 to 2004 before becoming Chief Scientist at Canon U.S. Life Sciences. Dr. Colwell is an internationally recognized authority on cholera and infectious diseases and has remarkable understanding of the complex interplay of the “Earth system.” The webinar series will continue on a monthly basis the first Tuesday of the month (except December) with presentations from leaders in ocean exploration and research.

- **Personnel News:**

- **US IOOS Program Office:** Dr. John Ten Hoeve, Presidential Management Fellow, joined the program office on August 27th! John will be working on several projects as a member of the Operations Division including the non-federal asset inventory, certification and the upcoming gaps assessment work we'll be doing in collaboration with the IOOC. John is a New Jersey native, and attended college at Penn State where he majored in meteorology, but we oceanographers won't hold that against him. He just completed his Doctorate degree from Stanford University where his research areas included: biomass burning aerosol-cloud-climate interactions over Brazil using space-based remote sensing and 3-D atmospheric modeling.
- **US IOOS Program Office:** On Tuesday, September 11, Robert Banks will join the Operations Division for 3 months as part of NOAA's Rotational Assignment Program. He comes to us from the Ocean Prediction Center of the National Weather Service's National Centers for Environmental Prediction (NCEP) where he works as a meteorologist and marine forecaster. He will be working with Becky on development of the National Glider Network Plan.
- **National Federation of Regional Associations:** Michelle Hohensee joined as the Program Coordinator for NFRA. Michelle will be picking up some of the work that Cassie did so ably these last few years. In addition, she will be attending to financial matters and to all the other varied tasks required to operate a small non-profit. Michelle has an MBA from the University of Colorado and most recently worked as Operations Manager for Save Our Shores in Santa Cruz, CA - a small non-profit which required staff to do a range of jobs from administrative details to policy work. Michelle will be working 20 hours a week for NFRA. Megan Treml will continue her work with NFRA focusing on newsletters and assisting with the Education Committee.

- **Funding Opportunity:** NSF Coastal Seas Initiative solicitation -- proposals are due in January 2013. There are two tracks for proposals from inter/trans-disciplinary teams <http://nsf.gov/pubs/2012/nsf12594/nsf12594.htm>:

- **Track 1: Incubator Research Proposals.** These proposals bring new or emerging inter/trans-disciplinary teams together to develop ideas and approaches. Projects could, for example, do one or more of the following: mine, integrate, and synthesize existing data sets; collect new data; conduct modeling experiments, test new integrative approaches, and/or identify new conceptual ideas and key gaps in knowledge and methods. It is anticipated that some funded incubator projects will lead to mature teams and ideas that will be submitted as full research proposals in a later round of Coastal SEES, pending

availability of funds. However, the emphasis of a Track 1 proposal should be the conduct of research and its outcomes, not preparation of plans and proposals. Incubator proposals should be in the range of \$200-600K over 2 years.

- Track 2: Research Proposals. These proposals support inter/trans-disciplinary teams to conduct major new integrated coastal systems research. These may include theoretical, field, laboratory and/or modeling activities. Research proposal budgets can be up to \$3 million over 5 years.

### Observation Subsystem:

- **High Frequency Radar/Radio:** For more information contact the US IOOS HFR Project Manager, Jack Harlan, [Jack.Harlan@noaa.gov](mailto:Jack.Harlan@noaa.gov):
- **Waveglider and Fetch Demo:** Fetch nodes have been redeployed for the second half of the Liquid Robotics/Sonardyne Demo. A standard fetch is being deployed near OOI's Pioneer Array and a second Tsunami Fetch is being deployed near one of NDBC's DART buoys. The waveglider will meet the deployment team at one of the two sites and begin its transits between the fetches. As the data becomes available, it will be hosted at NDBC and also served through MARACOOS.
- **National Glider Plan:** Writing teams developed during the August workshop have begun meeting to complete the draft national glider network plan in time for the IOOS summit. Additionally, the data management group met Aug. 30th to discuss glider data standard formats and to develop a plan to get a data plan and standards in place in FY13.
- **Challenger Mission:** Silbo underway, crossed the Tropic of Cancer in late August. Rutgers students are also working on new ways to visualize the three dimensional currents. Keep track of Silbo's voyage: <http://www.i-cool.org/?cat=77>

**Data Management and Communications (DMAC) Subsystem: To get on the IOOS System Status list which announces service changes, please contact Derrick ([Derrick.Snowden@noaa.gov](mailto:Derrick.Snowden@noaa.gov)) or Rob ([Rob.Ragsdale@noaa.gov](mailto:Rob.Ragsdale@noaa.gov)).**

- **DMAC for biological observations:** US IOOS Program Office/GCOOS/SECOORA project update. Mapping document of the NOAA Fisheries Comparative Assessment of Gulf Ecosystems (CAGES) trawl data to the IOOS BDP terminology is now available and under review by the project team. CAGES data is collected independently by the five Gulf of Mexico states (TX, LA, MS, AL, & FL). Its objective is to provide a single searchable database to assist comparisons between state fisheries and characterization of fisheries across the entire Gulf. GCOOS has deployed the ERDDAP service and tested the connection to CAGES data: <http://barataria.tamu.edu/erddap/info/index.html?page=1&itemsPerPage=1000>. SECOORA is updating to the latest version of ERDDAP (v.1.38). The MARMAP project team is still finalizing the mapping of their data to the IOOS term list. There is also extensive work on the metadata side for each of the datasets (i.e., CAGES, MARMAP and FIM).

- **Animal Acoustic Telemetry Observations:** 2 options to improve access to Animal Acoustic Telemetry Data including reconciling data and metadata content standards will be deployed in parallel:
  - Database “Views” - NetCDF (CDM) files - ERDDAP instead of Database - ERDDAP. Bob Simons (NOAA, SWFSC ERDDAP developer) suggested that this option will yield the fastest access to the data.
  - Using OGC services used for geospatial data -GEOSERVER that will connect to the POST GRES DATA with PostGIS and serve KML, Shapefiles, WMS, WFS, Jason etc.

**Modeling and Analysis Subsystem:** For information on the US IOOS Coastal Ocean Modeling Testbed, please contact the US IOOS Modeling Testbed Project Manager, Becky Baltes, [Becky.Baltes@noaa.gov](mailto:Becky.Baltes@noaa.gov)

- **U.S. IOOS Testbed:** The Coastal and Ocean Modeling Testbed has been accepted by NOAA's Testbed and Proving Ground Coordinating Committee (TBPGCC). With its acceptance, the program manager, Becky Baltes, will hold a seat on the committee and be able to coordinate and leverage work with other Testbeds within NOAA.
- **CeNCOOS and SCCOOS Release California-wide High Resolution Ocean Model:** CeNCOOS and SCCOOS are jointly supporting the development and operations of a 3-km statewide ROMS modeling system with real-time data assimilation and nowcasting/forecasting capabilities. The model is now running continuously, and is producing nowcasts every six hours and a daily 72-hour forecast for the California domain. Model data and graphics can be accessed at the CeNCOOS modeling page. [www.cencoos.org](http://www.cencoos.org)

#### **Interagency Collaboration:**

- **DMAC Steering Team:** 17 Steering Members and invited stakeholders attended the meeting at the Consortium for Ocean Leadership in Washington, DC. The meeting included an excellent presentation by EPA’s Kevin Kirby providing useful insights into EPA’s progress and challenges per managing observations data and enabling access and analysis. Discussions focused on defining a series of use cases to define a series of practical and executable tasks to advance DMAC priorities recommended in the ST’s Community White Paper submitted for the upcoming IOOS Summit. On the morning of Day 2, the team also discussed options with IOOC co-chair David Legler per his request to the ST to conduct a DMAC-based assessment of relevant Summit white papers that could also provide a foundation for a DMAC break-out discussion at the Summit. The team outlined a candidate approach for the breakout session. Ken Casey (NOAA/NODC), Rich Signell (USGS) and Charly (DMAC ST Chair) drafted a short concept for the break-out session and discussed this with NFRA’s Josie Qunitrell and NERACOOS’s Ru Morrison. ST members were assigned to taking the use cases forward.
- **IOOS and Links to the National Water Quality Monitoring Network:** Eye on Earth - IOOS Collaboration Project: Currently, the pop-up window for the KML file viewed in ArcGIS is

truncated. Dan Ramage (SECOORA) and Emilio Mayorga (NANOOS) are working through this issue with assistance from ESRI.

#### Other:

- **Recommended Reading:** A great read on the history of ocean technology developments. A collaboration of the Maritime Alliance and the Maritime Museum of San Diego produced a special issue of the Maritime Museum of San Diego's "Mains'l Haul: A Journal of Pacific Maritime History" (Vol. 48: 3 & 4 Summer/Fall 2012), that focused on the "maritime technology clusters" along the West Coast of the U.S. and Hawaii. The issue features articles on the history and technology developments in California, Oregon, and Hawaii, with great black and white photos of an earlier era. Articles include the history of the 109-year-old Scripps Institution of Oceanography, Oregon State University, the University of Hawaii, and the Navy bases and labs at Point Lorna. The issue features coverage on the undersea vehicles such as Trieste, USS Dolphin (AGSS-555), Moray, Deep Jeep, NEMO, Deep View, the CURV vehicles, plus ship technology such the FLIP and technology developments such as the Aloha Cabled Observatory. Michael B. Jones, president of The Maritime Alliance, writes the concluding remarks. As a non-profit, The Maritime Alliance is the recognized cluster organizer for the San Diego maritime technology community. Copies of this collectable issue can be ordered from the Maritime Museum of San Diego for \$15.95 plus shipping at [www.sdmaritime.org](http://www.sdmaritime.org) or call [\(619\) 234 9153](tel:6192349153).
- **Salinity Processes in the Upper Ocean Regional Study (SPURS):** The SPURS experiment involves not only sea-going oceanographers but modelers, and of course, remote sensing scientists using satellite data. As part of the daily posts from R/V Knorr, IOOC Co-Chair, **Eric Lindstrom**, NASA, will be blogging about the mission. Follow the mission at: <http://earthobservatory.nasa.gov/blogs/fromthefield>.
- **ACT in Action:** As part of the ACT Technology Evaluations of in situ pH sensors and pCO<sub>2</sub> analyzers, Gabrielle Canonico, Marlin Atkinson and Mario Tamburri are working with Marie Bundy and Dwight Trueblood to help inform the selection and use of instruments for the National Estuarine Research Reserve System (NERRS) System-Wide Monitoring Program. Similarly, Marlin Atkinson participated in the Coral Reef Ocean Acidification Monitoring Portfolio (CROAMP) workshop August 28-29, 2012, in Ft. Lauderdale, FL, sponsored by the NOAA Ocean Acidification Program, the NOAA Coral Reef Conservation Program, and the National Coral Reef Institute at Nova Southeastern University. Jason Smith participated in the August California Current Acidification Network (C-CAN) OA Monitoring Roadmap Workshop to further ensure that ACT efforts and expertise help inform the National Coral Reef Monitoring Program and the development of a West Coast Ocean Acidification Observing Network.
- **AOOS in Action for Education:** Over 350 people from the National Marine Educators Association convened in Anchorage in late June to share strategies for educating students about marine and freshwater systems. AOOS had an exhibit demonstrating some of its recent data tools, and Molly McCammon and members of other regional

observing systems spoke about incorporating technology and ocean data into the classroom.

- **Meeting with NOAA's Office of Exploration and Research:** Members of the US IOOS Program Office (Zdenka, Charly, Hassan, Gabrielle) met with OER Director Tim Arcano and Deputy John McDonough to discuss NOPP's Interagency Working Group on Ocean Partnerships emerging Task Force on Ocean Exploration and Undersea Research Technology, particularly with respect to possible intersections or leveraging opportunities per possible FY13 IOOS funding for sensor technology development.

**Congressional:** No update

**Communications/Outreach:**

- **SECOORA Partners in the News:** Mitch Roffer and Nick Shay in the news, "Hurricane Isaac May Stir Up Oil From BP Spill":  
[http://www.huffingtonpost.com/2012/08/28/hurricane-isaac-oil-bp-gulf-spill\\_n\\_1838064.html?utm\\_hp\\_ref=green](http://www.huffingtonpost.com/2012/08/28/hurricane-isaac-oil-bp-gulf-spill_n_1838064.html?utm_hp_ref=green)

**IOOS Conference Involvement:** This section will highlight those conferences where US IOOS is a sponsor/or has a major footprint.

**Upcoming Meetings :** To see the IOOS calendar, visit: <http://www.usnra.org/calendar.html> or <http://www.ioos.gov/about/calendar.html>

Cheers,

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Director, US IOOS Program Office

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